

REMARKS

Claims 49-81 and 83-110 were the subject of an Appeal Brief filed on March 5, 2007. The Examiner's Answer raised new grounds for rejection. In particular, the Examiner asserted that claims 49-51, 53-57, 61-63, 78-81, 83-85, 88-94, 101-103, and 111 were anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Baur et al. WO 94/21143. Additionally, the Examiner asserted that the remaining claims would have been obvious. In particular, the Examiner stated:

Baur et al disclose all the limitations of the cited claims. Since the composition include modified potato starch or corn starch, rice flour or corn flour, Baur et al. disclose embodiment in which the composition includes modified potato starch and rice flour. The amounts of rice flour and dextrin falls with [sic] the ranges claimed; thus, it is inherent the ratio also falls within the ranges claimed. However, if it is not inherent, it would have been obvious to one skilled in the art to select various ratios within the range of flour and dextrin disclosed by the reference depending on the type of coating and properties wanted. For example, it would have been obvious to use equal proportion of dextrin and flour, a ratio of 1:1 if one wants equal contribution of properties from both component of rice flour and dextrin.

In Applicants' Appeal Brief, in summary, Applicants argued that the cited Baur et al. reference did not disclose with sufficient specificity the critical ratio of rice component to dextrin component as claimed to anticipate the claims. Additionally, due to the demonstration in the Fourth Declaration of John Stevens of the criticality of that ratio range over the range claimed, the claims would not have been obvious.

In the Examiner's Answer, the Examiner stated arguments A & B as follows:

- A. Appellant further argues Baur et al do not anticipate the claims because the claimed subject matter must be disclose [sic] in the references with sufficient specificity to constitute an anticipation. Appellant states the reference does not indicate with sufficient specificity the critical ratio of rice component to dextrin component. This argument is not persuasive. The reference specifically teaches that the amount of rice flour is from 2 to 25% or 5-50 and the amount of dextrin is 2-20; thus the combined amount of dextrin and rice flour can be 4-45 in one embodiment and 7-70 in another embodiment. Both the end points of the two embodiments are within the range claimed and the point in between the two ends are within the range claimed. If the amounts are the same, then, it is

inherent the ratio also is the same. For example, if the rice component is 10% and the dextrin is 20%, then the ratio is 1:2 and the combined amount is 30; both falls within the ranges claimed. In any event, it would have been obvious to one skilled in the art to select various ratios within the range of flour and dextrin disclosed by the reference depending on the type of coating and properties wanted. For example, it would have been obvious to use equal proportion of dextrin and flour, a ratio of 1:1 if one wants equal contribution of properties from both component of rice flour and dextrin.

- B. On pages 25-27 of the appeal brief, appellant makes reference to the fourth declaration made by John Stevens. The declaration states that the ratio of rice to dextrin gives unexpected result with respect to overall hedonic score, crispness, toughness, tooth compaction and Munsell Color. The declaration is not found to be persuasive to overcome the rejection. The declaration fails to make any comparison between the claimed invention and the prior art. There is no comparative data between the coating and method as claimed versus the coating and the method disclosed in Baur. Baur et al disclose a coating containing the same percentage of rice flour and dextrin as claimed. Furthermore, the declaration is not commensurate in scope with the claims because the data shown is only to potato product. The coating composition as claimed is not directed to any specific substrate and the method as claimed is directed to any food substrate, not just potato.

Applicants have cancelled all of the pending claims in this case other than claims 111 and dependent claims 125-135 and new independent claim 136 and its dependent claims 137-142. A majority of the new claims are drafted such that the coating composition "consists of" the claimed ingredients.

Regarding the Examiner's argument "A" above, claim 111 specifically claims a method for providing increased surface crispness of a potato substrate by coating the potato substrate with a coating composition that contains a rice component and a dextrin component where the ratio of rice component to dextrin component is from about 1:2 to about 5:1 and the composition is free of corn starch. At least as Applicants understand the present rejection, the Examiner has stated that the Baur et al. reference anticipates the claims because the reference discloses a very broad range of possible compositions and, if one selects one particular ingredient or another particular ingredient in particular amounts, one could reconstruct the presently claimed invention. As discussed in Applicants' Appeal Brief, in order to anticipate

pending claimed range, the claimed subject matter "must be disclosed in the reference with sufficient specificity to constitute an anticipation under the statute." MPEP § 2131.03; see also *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991 (Fed. Cir. 2006). Last year, in *Atofina*, the Federal Circuit considered whether a patent directed to a method of synthesizing difluoromethane through a gas phase fluorination in the presence of oxygen and a catalyst within a particular temperature range was anticipated by the broad disclosure of a Japanese reference. *Atofina*, 441 F.3d at 990-99. The Court stated that "[i]t is well established that the disclosure of a genus in the prior art is not necessarily a disclosure of every species that is the member of a genus." *Id.* at 999. The Court ultimately held that a disclosure of a temperature range of 100-500°C did not anticipate a claim limitation of a temperature range of 330-450°C, even though the disclosure "is broader than and fully encompasses the specific temperature range claim" of the claimed invention. *Id.* at 999. The Court also held the disclosure of a 0.001 to 1.0% molar ratio range in the prior art did not anticipate the claimed range of 0.1 to 5.0% molar ratio since "no reasonable fact finder could determine that this overlap describes the entire claimed range with sufficient specificity to anticipate this limitation of the claim." *Id.* at 1000.

In this case, like *Atofina*, the cited reference, Baur et al., does not disclose the claimed subject matter with sufficient specificity to constitute anticipation. Applicants respectfully submit that the Baur et al. reference does not indicate with sufficient specificity the critical ratio of rice component to dextrin component as claimed in the pending application. In fact, Baur et al. apparently consider a different ratio to be important. The only disclosure in the Baur et al. reference relating to a ratio range of dextrin to any other component is the ratio range of dextrin to total starch of the composition.

As discussed above, the Baur et al. reference contains a disclosure which is extraordinarily broad concerning (1) flour and (2) corn starch and/or potato starch. In fact, the disclosure by Baur et al. states in Table 1 that the flour could comprise rice flour or corn flour. Similarly, Table 1 states that the composition may contain modified corn and/or potato starch. Any of the extraordinary number of combinations of corn starch alone or corn and potato starch within this range are outside of the presently claimed invention as the claims state that

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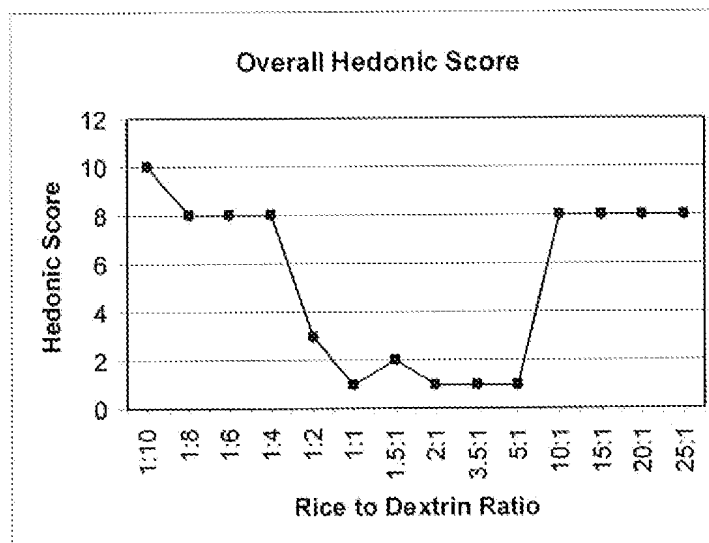
the composition is free of a cornstarch component. Additionally, the reference explicitly teaches away from the claimed invention by specifically stating that "white corn flour is preferred." (See Baur et al. at p. 3). In view of the fact that the Baur et al. reference discloses broad ranges and alternative ingredients, Applicants respectfully submit that it does not disclose the criticality of the ratio range of rice component to dextrin component. Accordingly, Applicants respectfully assert that the Baur et al. reference does not anticipate the pending claims.

Next, the Examiner asserts that if the claims are not anticipated, they would have been obvious. Under MPEP § 2144.05, Applicants can overcome an obviousness rejection based on the overlapping ranges by showing the criticality of the claimed range. Applicants have submitted the Fourth Declaration of John Stevens dated July 21, 2006, which demonstrates the surprising and unexpected results of the presently claimed compositions and also demonstrates the criticality of the rice/dextrin ratio range. (Fourth Decl. of John Stevens ¶¶7-16).

John Stevens conducted and supervised testing of coating compositions on a french fry and their evaluation. (Fourth Decl. of John Stevens ¶¶8-9). Samples were prepared in the following manner as dry mixes. (Fourth Decl. of John Stevens ¶10). One hundred count potatoes (substrate) were peeled to remove the skin, then cut using a 0.300" cross-sectional raw cut blade set giving a Long Fancy length grade (2-inch to 4-inch lengths). (Fourth Decl. of John Stevens ¶10). The substrate was blanched at about 180-185°F for about seven minutes until just slightly crisp. (Fourth Decl. of John Stevens ¶10). The substrate was dipped in 0.5% SAPP/1.0% salt/water solution at 140°F for 40 seconds. (Fourth Decl. of John Stevens ¶10). The substrate was dried in a forced-air convection oven on "high" fan speed at 160°F for 14 minutes to get about 10-11% moisture loss, turning the substrate once half way through. (Fourth Decl. of John Stevens ¶10). The wet batter slurries were next prepared at 40% WBS (wet batter solids). (Fourth Decl. of John Stevens ¶10). In a five quart Kitchen-Aid, dry batter was wire whipped with the water and mixed for one minute on stir speed. (Fourth Decl. of John Stevens ¶10). Next, the edges were scraped and mixed for five more minutes on speed level 2. (Fourth Decl. of John Stevens ¶10). Fifty-five grams of the raw substrate was next coated with batter having one of the rice to dextrin ratios tested, and then blown off lightly

with an air knife, giving the Control a pick-up of 18-20%. (Fourth Decl. of John Stevens ¶10). The substrate was then par-fried for approximately 50 seconds at 365°F in a deep fryer. (Fourth Decl. of John Stevens ¶10). The substrate was frozen for at least 24 hours and then reconstituted at the following specifications: 1.5 pounds at 350°F for 2.5 minutes. (Fourth Decl. of John Stevens ¶10). The substrate is then placed under a heat lamp, lightly salted, and evaluated over ten minutes. (Fourth Decl. of John Stevens ¶10).

The Overall Hedonic Score of each sample is displayed in the graph below. The Overall Hedonic Score refers to a comparative score of products against a control product after reviewing all of the individual sensory parameter scores for each product, namely, crispness, toughness, tooth compaction and Munsell color results of the food coating composition as applied to a french fried substrate. (Fourth Decl. of John Stevens ¶11). A hedonic score of "1" ranks as the best possible product and a score of "10" ranks as the worst possible product. (Fourth Decl. of John Stevens ¶11). As you can see from the graph below, the samples which displayed the best Overall Hedonic Score were those samples comprising a ratio of rice component to dextrin component of from about 1:2 to about 5:1. (Fourth Decl. of John Stevens ¶11).



(Fourth Decl. of John Stevens ¶ 11).

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Specifically, Applicants' results show that that the ratio of rice component to dextrin component of the claimed invention produces unexpected and surprising results with regard to the crispness, toughness, tooth compaction and Munsell color of the substrates produced in accordance with this invention. (Fourth Decl. of John Stevens ¶¶11-16). Applicants respectfully submit that these results demonstrate the surprising and unexpected results which are found by using the food coating composition claimed in the present invention comprising a ratio range of rice component to dextrin component of from about 1:2 to about 5:1 and the criticality of this ratio range. (Fourth Decl. of John Stevens ¶16). In view of the fact that the Baur et al. reference does not disclose or suggest the criticality of the ratio range of rice component to dextrin component and the surprising and unexpected results demonstrated above and in the accompanying Fourth Declaration of John Stevens, Applicants respectfully submit that the pending claims would not have been obvious and are in condition for allowance.

In the Examiner's Answer mailed on July 12, 2007, the Examiner expressed two reasons that the Fourth Declaration of John Stevens was not persuasive. First, the Examiner believed that the Declaration is not commensurate in the scope of the claims because the data shown is only to potato product and the claims were not directed to any specific substrate. Amended claim 111 is limited to a potato substrate coated with the coating composition.

The second concern of the Examiner was that the Declaration failed to make any comparison between the claimed invention and the prior art. Applicants respectfully submit that the Declaration essentially does compare the claimed invention to the prior art by demonstrating results outside the claimed ratio range. Moreover, Applicants respectfully submit that it is not necessary in this case to make such a comparison as the Declaration was presented to show the criticality of the claimed ratio of rice component to dextrin component, which it clearly does.

Finally, Applicants have presented new claims where the claimed coating composition "consists of" various components, none of which are wheat flour. The use of the transition phrase "consists of" excludes any element or step or ingredient not in the claims. (MPEP § 2111.03). The Baur et al. reference specifically discusses that the first component of

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its coating is wheat flour. (See p. 2 of Baur et al.). Immediately thereafter on p. 3 Baur et al. state:

The next essential component is starch which may comprise a combination of a modified starch, preferably a modified corn-based or a modified potato-based starch, and rice or corn flour.

(Baur et al. at p. 3) (emphasis added). Accordingly, at least claims 128-142 are not anticipated and would not have been obvious in view of Baur et al. given the express teaching away from the subject matter of those closed claims that exclude wheat flour, an essential component of the composition of the Baur et al. reference.

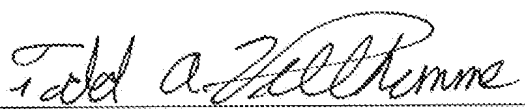
Applicants have made a concerted effort to place the present application in condition for allowance, and a notice to this effect is earnestly solicited. In the event that there is any remaining formalities or other issues needing Applicants' assistance, Applicants request the Examiner to call the undersigned attorney at (616) 949-9610.

Respectfully submitted,

CHERE L. B. STEVENS ET AL.

By: Price, Heneveld, Cooper,
DeWitt & Litton, LLP

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Date


Todd A. Van Thomme
Registration No. 44 285
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, Michigan 49501
(616) 949-9610

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